AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1 –22. (canceled)

23. (new) A link state database (LSDB) retrieval method adapted to an interface on a network, comprising:

receiving a control packet according to a prescribed routing protocol;

storing a prescribed item of the control packet regarding a physical address in a ternary content addressable memory (TCAM);

storing a remaining item of the control packet in an external memory;

determining whether a new control packet matches a previous control packet previously registered with the TCAM in terms of the prescribed item; and

retrieving a desired LSDB based on the determination result with reference to the TCAM.

24. (new) The LSDB retrieval method according to claim 23, wherein the new control packet is transferred to a router when the new control packet does not match the previous control packet, and wherein the new control packet is discarded when the new control packet matches the previous control packet.